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Via Electronic Filing

Marlene H. Dortch Secretary Federal Communications Commission 445 12th St, SW Washington, D.C. 20554

Re: **GN Docket No. 14-177**; Use of Spectrum Bands Above 24 GHz For Mobile Radio Services

Dear Ms. Dortch:

AT&T Services, Inc. ("AT&T") files this *ex parte* letter in the above-referenced docket as a follow up to its comments in response to the Commission's *Third FNPRM* on sharing mechanisms for the 37.0-37.6 GHz band.¹ As AT&T noted in its reply comments, the initial comments in response to the *Third FNPRM* appeared to reflect a variety of proposals, but all of those proposals generally shared relatively similar core principles. By this letter, AT&T seeks to advance the development of sharing rules by distilling from the record a proposal that meets the needs of the broad range of spectrum interests in this proceeding.

There Should Be a Common Access Mechanism for All Shared Users. As an initial matter, the record supports sharing rules should employ a common portal or access mechanism for all users seeking shared access to the band, whether those users are commercial or Federal.² Setting aside grandfathered Federal facilities protected by exclusion zones, any users seeking access to the band going forward should follow the same procedures—the fundamental essence of co-equal sharing. Indeed, given the premise of co-equal sharing and the absence of any evidence of use cases for

¹ See Comments of AT&T Services, Inc., GN Docket No. 14-177, WT Docket No. 10-112 (filed Sept. 10, 2018) ("AT&T Comments"), Reply Comments of AT&T Services, Inc., GN Docket No. 14-177, WT Docket No. 10-112 (filed Sept. 28, 2018) ("AT&T Reply"). See also Use of Spectrum Bands Above 24 GHz for Mobile Radio Services, GN Docket No. 14-177, WT Docket No. 10-112, Third Report and Order, Memorandum Opinion and Order, and Third Further Notice of Proposed Rulemaking, FCC 18-73 (June 8, 2018) ("Third FNPRM").

² Comments of Dynamic Spectrum Alliance at 2, GN Docket No. 14-177, WT Docket No. 10-112 (filed Sept. 10, 2018) ("DSA Comments"); Comments of Intel Corporation and Cisco Systems, Inc. at 5, GN Docket No. 14-177, WT Docket No. 10-112 (filed Sept. 10, 2018) ("Intel/Cisco Comments"); Comments of Open Technology Institute at New America at 3, GN Docket No. 14-177, WT Docket No. 10-112 (filed Sept. 18, 2018) ("OTI Comments"); Comments of Starry, Inc. at 2, GN Docket No. 14-177, WT Docket No. 10-112 (filed Sept. 10, 2018) ("Starry Comments"); Comments of Qualcomm Incorporated at 8-9, GN Docket No. 14-177, WT Docket No. 10-112 (filed Sept. 10, 2018) ("Qualcomm Comments"); Comments of the Telecommunications Industry Association at 3-5, GN Docket No. 14-177, WT Docket No. 10-112 (filed Sept. 10, 2018) ("TIA Comments").



Federal users that differ from non-Federal users,³ there is no record basis to suggest that it would be necessary or appropriate to develop parallel access mechanisms based on the status of the prospective sharing entity.

Commenters Concerns Can Be Addressed With A Single Class of Users. While a number of commenters have suggested the creation of a second "tier" of use, which they analogize to general authorized access ("GAA") use in the Citizens Broadband Radio Service ("CBRS") band,⁴ those comments can be addressed without adding that degree of complexity to the regulations. Specifically, the expressed rationale for creation of a separate tier of use is that the rules should permit expedited or simplified processing for indoor-only uses—the limiting concept being that indoor-only devices are unlikely, given the propagation characteristics of the band, to interfere with devices that are outside of the building in which they are located. However, that goal can be achieved in a much more limited manner—the Commission could simply permit indoor-only devices to be deployed without coordination.

The Access Mechanism Should Start Very Simply with Registration of Polygons Defining the Area of Operation. Another recurrent theme in the comments was the notion that the sharing access mechanism for the 37.0-37.6 GHz band could initially be extremely simple, and evolve as needed as usage in the band increases. Initially, access could be governed by simple registration requirements. Spectrum sharers could register a defined polygon representing their anticipated area of operation. If the polygon does not overlap any existing registered polygons from other operators, the registrant could make use of all of the available spectrum in that area. If there are overlaps, the registrant would have to either negotiate an arrangement with the overlap licensees or would be entitled to a pro rata amount of spectrum given the number of overlapping polygons. Notably, there is no need to differentiate between use cases—whether the intended use is point-to-point, fixed wireless point-to-multipoint, single base station IoT, or otherwise, the system should be capable of being rendered as a polygon-based operational contour. And, this arrangement encourages licensees to describe their area of operation in a limited manner and encourages overlapping licensees to come to reasonable accommodations that take advantage of the band's real world propagation characteristics.

The Access Mechanism Should Require Site Registration to Validate Use and Assist In Coordination. In order to keep a polygon registration active, the licensee would register simple radio parameters for sites deployed under the polygon, and the Commission can require a certain amount of build-out to validate the scope of the polygon. For example, the Commission could require that sites covering some percentage of the population or land area within the polygon would need to be constructed within a defined timeline. This mechanism would also permit system users should to access site registration data for overlapping areas of other licensees' polygons, which will assist with coordination. Registered sites would re-coordinate on a periodic basis to "renew" their rights and to accommodate, if needed, new overlapping users.

The Access Mechanism Should Be Defined In a Manner That Can Evolve If Needed. With the limited propagation characteristics of the band, the access mechanism does not need to be imbued with a great deal of complexity at the outset. But, as commenters have noted, there is the potential to migrate the service to one that allows for more intensive use in the future as needs evolve. But a key

³ Even if there were some inherent rationale for differentiating between Federal and non-Federal users, as AT&T and others have pointed out, the limited propagation characteristics of the band (and, if adopted, more lax requirements for indoor-only operations) would provide Federal users with substantial control over deployment of shared systems on Federal lands and in Federal facilities. AT&T Comments at 7; AT&T Reply at 9; Intel-Cisco Comments at 5; Starry Comments at 19-20.

⁴ Intel-Cisco Comments at 6-7, 18-20; OTI Comments at 10-12; DSA Comments at 1-2.



aspect of evolution is compatibility, so sound public policy suggests giving some consideration to how the system might evolve in the future. In such regards, AT&T strongly believes that if the access mechanism is to evolve, it should evolve to a system of sensing at the radio level. Device access in the millimeter wave bands does not need to be regulated by a database or any complex system of calculations based on propagation or aggregate interference. Instead, devices should be able to be upgraded, if necessary, in the future to sense other others and mediate their use accordingly.

The Commission Should Require Professional Installation To Ensure Compliance with the Coordination Requirements. As the Commission has done with some other bands where band-specific coordination requirements are necessary, the Commission should require professional installation of 37.0-37.6 GHz devices. This requirement should not be onerous for operators, even small operators, but would discourage the commercial sale of equipment that might be deployed in an uncoordinated manner.

Pursuant to Section 1.1206(b)(2) of the Commission's rules, an electronic copy of this letter is being filed in the above-referenced. Please contact me should you have any questions.

Respectfully submitted,

Stacey Black